Comments requested

Two questions have been posed which may be of increasing relevance in conceptualizing (and funding) the field of human ethology. The first (from J. A. Ambrose) is, What differentiates ethological from non-ethological research? Second (from F. Elmadjian) is, What are the really critical issues in human ethology?

Books, etc. in preparation: send materials direct to people indicated.

Dr. George V. Coelho (NIMH Parklawn 18C04, 5600 Fishers Lane, Rockville, MD 20034) is interested in developing a bibliography on early behavioral development relevant to child mental health.

Dr. Samir K. Ghosh (Arbeitsgruppe fur Humanethologie, Max-Planck-Institute, D-8136 Percha/Starnberg, Enzianstr. 12, Postfach 49, West Germany) is collecting materials for two books. For the first, "Grammar of Greetings", he would appreciate bibliographies and data (credit will be given, of course). Chapters will be on greeting behavior and 1) children, 2) sex differences, 3) biological bases, 4) biogrammar, 5) departure and separation.

The second book will be an edited volume on Biology and Language (Mouton & Co.) and papers are solicited. He says, "This will be a handbook for both advanced graduate students and the teachers on the topic, with contributions from biologists, linguists, anthropologists, human ethologists, psychologists, psychiatrists, primatologists and communication specialists. All articles will be biologically oriented and our focus will be on human language. Word-limit for an abstract (500 words) and the paper (7000 words):: due: abstract--as soon as possible and Paper--positively September-1974.

Newsletters, Journals, etc.

L. V. Harper reports that Developmental Psychobiology accepts ethologically oriented work occasionally.

Dr. Mary Ritchie Key (Program in Linguistics, University of California at Irvine, Irvine, CA 92664) distributes a newsletter titled "Nonverbal Components of Communication: Paralanguage, Kinesics, Proxemics." As Dr. Key says, "The newsletter has no particular school of thought to influence it, nor any controlling theoretical approach; it will attempt to represent all points of view."

Aristide H. Esser edits a "journal" called Man-Environment Systems. "Reports of completed or continuing research projects, dissertations or theses dealing with the interrelationships between social or behavioral processes and physical environmental systems may be submitted for publication in M-ES." Postpaid subscriptions/ 6 issues

	US	Foreign
Students	$ 8.00	$10.40
Individuals	15.00	17.40
Institutions	18.50	20.90

Address: The Association for the Study of Man-Environment Relations, P. O. Box 57, Orangeburg, NY 10962. Membership in ASMER is $20/year ($12 for students) and includes subscription to M-ES.

An excellent annotated bibliography by Tony Pfeiffer, "Some References to the Study of Human Ethology" can be obtained separately for $2.00 from M-ES.

We are now compiling a roster of human ethologists including their recent publications, addresses, etc. This will be out by early summer.

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Abstracts from the Human Ethology session of the Animal Behavior Society meeting, Champaign-Urbana, IL, May 25-27. The papers are ordered by increasing age of the subjects.

1) Janet Bare, Committee on Human Development, Univ. of Chicago, Infants' Reactions to Dilated and Constricted Pupils of an Adult Stranger in a Naturalistic Setting: A Preliminary Investigation

An attempt was made to determine if human infants could attend to facial characteristics as small as the pupil of the eye, and if their reactions to very small or large pupils resembled those of adults. It was hypothesized that infants would smile more to the Investigator when her pupils were pharmacologically dilated than when they were constricted.

The mean age of the 16 Subjects was 13 weeks. Infants were tested twice in a controlled social situation. Number of smiles to the I was recorded for each condition (dilated and constricted). The results for the group were in the predicted direction, but did not reach statistical significance. Surprisingly, the females' responses were similar in both conditions, while the males' varied as hypothesized.

2) Sarah Hall Sternglanz, James Gray, & Melvin Murakami, Dept. of Psychology, State University of New York, Stony Brook, NY, An Ethological Approach to Adult Preferences for Infantile Facial Features

In 1943 Konrad Lorenz postulated that certain infantile cues served as releasers for caretaking behavior in human adults. This study is an attempt to test this hypothesis and to identify relevant cues. The stimuli studied were variations in facial features and the responses were ratings of the attractiveness of the resultant infant faces. Parametric variations of eye height, eye width, eye height and width, iris size, and vertical variations in feature position (all presented in full face drawings) were tested for their effect on the ratings, and highly significant preferences for particular stimuli were found. In general these preferences are consistent across a wide variety of environmental factors such as SES, ethnic background, and experience with children. Work is in progress on further facial variations and a cross-cultural sample.

3) Everett Waters, Institute of Child Development, University of Minnesota, "Wariness in Infancy: An Exploratory Analysis of the Function of Wariness Behavior in Infancy"

It is often thought that human infants are sensitive to a variety of "natural cues to danger". Fear or avoidance of visual cliffs, looming objects, loss of support, and approach by unfamiliar adults are thought to have survival advantage to the infant and to reflect early behavioral adaptations.

Thirty infants were studied longitudinally over a period of 5 months in the first year. Each infant was videotaped in a variety of laboratory situations involving variations in familiar and unfamiliar social approaches. Approximately 30 behavior categories were developed for various forms of infant smiling, crying, and avoidance behavior. Measures of heart rate changes were also recorded.

4) Slobodan B. Petrovich, University of Maryland, Baltimore County, Baltimore, MD, Is There an Ethological Theory of Attachment?

The expansion of ethology in the last few decades and the embrace of ethological principles and findings by neighboring disciplines and areas of inquiry provides a strong testimony for the impetus and significance of the biological approach to the study of behavior. It is not surprising, therefore, to find that ethology is having an impact on theoretical interpretations of human development, attachment in particular. However, it is perplexing to observe that formulations which were influenced in part by ethological premises and findings are increasingly referred to as the ethological theories of attachment. This paper suggests that there exists no ethological theory of attachment, and the support for that thesis is offered by historical, theoretical, methodological and empirical analysis of some of the representative literature.

5) Robert S. Marvin & Daniel C. Mossler, Dept. of Psychology, Univ. of Virginia, Charlottesville, VA, A Methodological Paradigm for Describing and Analyzing Complex Non-Verbal Expressions: The Development of Coy Expressions in Preschool Children

The focus was on those complex expressions by which others infer internal states within the child. The particular expression chosen was coyness. Three studies with different methodologies were conducted. The first study led to the hypothesis that two and three year olds would display coy expressions of very low complexity compared to four and five year olds. The second study indicated that the major change came between three and four, while the third study showed that even naive observers could identify the basic elements, the overall expressions, and the developmental changes.

6) William Charlesworth, Institute of Child Development, Univ. of Minnesota, "Ethology's Contribution to the Study of Intelligence"

Human intelligence is viewed as a mode of adaptation to the environment. This view implies that an adequate theory of intelligence must include information on the daily environmental demands to which the individual is required to respond and the manner in which he responds. Intelligence as an inferred disposition is distinguished from intelligent behavior which is an observable characteristic of the individual's everyday behavior. The ethological approach to intelligence, in contrast to the psychometric, is defined as acknowledging the phylogenetic-comparative dimensions of intelligence, as well as the ontogenetic-individual dimensions.

An observational method is presented for studying intelligent behavior as it occurs in the natural habitat. Data obtained on the behavior of four preschool children observed at home each minute for 30 hours selected over a ten day period are presented. The frequency and nature of intelligent behaviors as well as other behaviors are listed and discussed.

7) Patrick R. Harrison, Hope College, Holland, Michigan, Environmental Constraints on the Behavior of Preschool Children in a Naturalistic Setting

This study reports the results of an intensive field investigation of the environmental constraints operating on the behavior of children in outdoor areas around their homes. While representing the general viewpoint of N.G.B. Jones and W.C. McGrew, the study includes both descriptive and sequential analysis of the relationship between the physical environment and the ongoing behavior

of the preschool children. Subtopics include; bounds on expansion of the behavioral range, responses to changing weather conditions, constraints on general movement patterns, location specific behaviors, constraints imposed by fixed manipulanda and transient stimuli as disruptors of sequentially organized behavior chains.

8) Ralph G. Noble & Jane D. Noble, University of Wisconsin, Madison, WI, How Do Preschool Children Gain Access to Objects?

This study examined attempts of preschool children to gain access to objects in the possession of others. An event sampling strategy was employed to obtain descriptions of approximately 250 examples of such interactions. Data was based on 30 hours of observation collected during free play in two nursery school classrooms. Each classroom contained nine males and five females ranging in age from 41 months to 55 months.

The report will provide a preliminary description of the basic tactics used to gain access to objects, sex differences in the tactics employed, and will discuss the relation of various factors to the outcome of the interactions.

9) Lawrence J. Fitzpatrick, Institute of Child Development, Univ. of Minnesota, "Application of a New Method to Measure Sequential Organization of Behavior: Tool-Using Behavior in Young Children, a Test Case"

This paper discusses a new method to measure sequential organization which exists in behavior patterns N units long utilizing an N-way contingency table analysis which allows specified cells in the expected table to be constrained to zero. The topical example involves progressive development of organization in the behavior of 120 children from 1 to 4 years old in two tool-using tasks. During each task presented to the child his task-oriented behaviors were recorded in their order of occurrence and analyzed for sequential organization in lengths of three events. One year olds exhibited certain organized patterns which could best be described as circular and non goal-directed, while older children employed patterns more oriented toward solution. Solutions of the oldest and most successful children were also the most stereotyped.

10) Anna Katz Lieblich, Department of Behavioral Sciences, The Univ. of Chicago, Tongue-Showing: Facial Signaling in Humans and Apes.

A primate facial display, Tongue-showing, was identified, and a study conducted to determine the message of the display (Smith, Chase and Lieblich, Semiotica, in press). This work is reviewed and experiments are described which examine the message hypothesis.

11) Samir K. Ghosh, Human Ethology Group, Max-Planck-Institut, Percha/Starnberg, West Germany, Why do Men Greet?

Why do men greet? And what do they do in such a situation? Are there cross-cultural universals in greeting behaviors? Can we deduce greetemes of a particular culture or taking the worlds' cultures as a whole? How far is the greeting behavior preprogrammed, i.e. how far and to what extent can greeting behavior be seen as inherited in human behavior? We are asking questions which will be relevant from the viewpoints of methodology and epistemology.

The question of learned vs. inherited cannot be solved if one does not take the particular culture into consideration, and also the relevant animal behavior into perspective.

12) Alan P. Fiske, Committee on Human Development, Univ. of Chicago, A Sensitive Period in the Formation of a Group Bond

A sensitive period near puberty exists in humans during which an enduring bond may be formed to a primary reference group, according to theory and evidence from the literature. This sensitive period is characterized by the spontaneous manisfestation of conforming, compliant, and cooperative behavior toward in-groups sharply differentiated from outsiders. Particular kinds of experience during the sensitive period result in the stable differentiation of altruistic and affiliative behavior directed toward the we-group from selfish, aversive, and aggressive behavior directed toward "them". Evidence is cited from reviews of studies of racial and ethnic prejudice, nationalism, moral development, identity formation, peer groups and friendship choices, conformity, and initiation rites.

13) Richard C. Williams, Committee on Human Development, Univ. of Chicago, Human Adolescents as a Primate Group

Few social scientists have systematically observed human adolescents in their varied ecological niches. The present research addressed itself to this shortcoming, applying concepts, methods, and findings of sub-human primate studies to a five week naturalistic observational study of six thirteen year-old males in a summer camp. The purpose was to illustrate similarities between human adolescent and other primate groups in the establishment and stability of a dominance hierarchy, modalities and frequencies of dominance interactions, spatial distributions, and behavior during group movement. Correlations between the dominance hierarchy and physical development, athletic ability, leadership, and popularity of group members are also reported.

14) Mary Hoaglund & William Charlesworth, Psychological Foundations, Univ. of Minnesota, "Behavioral Accompaniments of Mental Problem-Solving"

As part of a larger project involved in applying ethological methods to epistemic activities in humans, thirty subjects were observed taking the written examinations for their first driver's license. Narrative accounts of behaviors were recorded live for each person during the entire test period (7-36 min.). Behaviors were grouped into touching the clothing or body ("preening"), tapping with hand or foot, jiggling or rocking knees, etc. ("displacement"), upper-body shifts and upper body movements resulting in no changes in posture ("hitches"), lower body shifts, eyes raised from paper, obvious rechecking of work, vocal behaviors, and changes in facial expression. Correlations were obtained between all behavior variables, plus sex, test score, testing time and total behaviors for the first and last half of the testing time.

15) Louis A. Fourcher, Ph.D., Neuropsychiatric Institute, University of Illinois - Medical Center, Chicago, IL, Time and Motive in the Description of Human Behavior

This paper applies a phenomenological analysis to the ethological description of conscious human action. Action is defined as behavior that is guided by a consciously projected or intended goal. This experienced "project" temporally precedes the action and constitutes an anticipation of the action as a completed act. The distinction between regarding motivation as relative to the intended project and motivation as relative to the already accomplished

act is shown, by example, to be crucial for ethological description. A further distinction is made between the "monothetic" description of acts as complete unities and the "polythetic" description of acts as complete unities and the "polythetic" description of acts as built up over time. It is pointed out that some forms of action can be grasped adequately only through polythetic description. The differential emphasis on polythetic and monothetic understanding in egalitarian and hierarchical social interactions is also discussed.

16) Roger Larson, Dalhousie University, Halifax, Nova Scotia & Robert Coffin, Memorial University, St. John's, Newfoundland, Canada, Rules of Inference When Arguing From Non-Human to Human Behavior

Analogy and homology will be discussed in relationship to social behavior.

17) Donald R. Omark, Univ. of Illinois - Urbana, Robert S. Marvin II, Univ. of Virginia, & Chris Tanz, Univ. of Illinois - Urbana, Methodological Considerations For Naturalistic Observations

Within the field of human ethology a number of methodological problems are apparent. The first arises because of gross errors inherent in the time-sampling techniques widely used throughout ethological, and other observational studies. A second problem lies in the behavioral categories currently being recorded. Some 'levels' of behavior are easier to see and record in certain situations but they may or may not be the behaviors that actually affect the individuals involved in the interaction. The third area involves language and how to adequately record its usage and meaning within interactive sequences. These three areas are discussed and suggestions are offered for potential consideration by human ethologists.

18) James Gray, Department of Psychology, State University of New York, Stony Brook, NY, An Ethological Approach to Human Preferences for Events in a Computer Presented Story about Aggression

An experiment was designed to test some predictions about behavior based on an ethological view of human aggression. Subjects were asked to direct the events in a story presented to them on computer terminals. The findings were that subjects tended to increase the fission between two groups as the level of aggression was experimentally escalated in the story. Subjects suggested harsher treatment of a thief when they said the stealing was between-groups than when they said the stealing was within-groups. Subjects also had a tendency to increase aggression with increasing provocation to aggression. Some data were collected suggesting that the above behavior is constant across cultures.

19) Glenn E. Weisfeld, Committee on Human Development, Univ. of Chicago, Mechanisms Underlying Reciprocal Altruism: Moralistic Aggression, Guilt, and Pride

Trivers described reciprocal altruism as the exchange of help between conspecifics; sympathy, gratitude, and friendship evolved to encourage altruism, and moralistic aggression and guilt evolved to discourage unaltruistic acts. If guilt evolved to discourage unaltruistic acts. If guilt discourages acts which invite moralistic aggression, so might pride exist to encourage acting in ways which invite gratitude. Competition for pride may have evolved out of mechanisms underlying "premoralistic aggression": competition for such rights to resources as territory or rank. Parallels exist between the expression of pride and guilt or shame in man and that of dominance and submission in mammals; furthermore, homologous neural structures may be involved.

20) F. T. Cloak, Jr., Sangamon State University, Springfield, IL, That a Culture and a Social Organization Mutually Shape Each Other Through a Process of Continuing Evolution

The analogy between an organism and a society is re-drawn, in the light of recent knowledge about organisms; i.e., about ontogenetic processes. The analogy is then used to illuminate the process by which cultural instructions construct and operate a society, through controlling the behavior of individual organisms; and the process by which the resulting society, being environmental to the instructions, affects their subsequent occurrence. Illustrative examples are drawn from Kung Bushman and aboriginal Australian societies.

21) Joan S. Lockard, Ph.D., Departments of Neurological Surgery and Psychology, Univ. of Washington, Seattle, Adult Human Ethological Data on the Phylogenetic Distinction between Smiling and Laughter

The ethological problem of whether laughter is simply a more intense form of smiling or whether the two displays have different phylogenetic origins is addressed in this study. The present study was undertaken to discern the differences, in both form and context, that adult smiling and laughter may take. It was hypothesized that if the displays are of different origins they should be, at least, either temporally distinct or mutually exclusive in certain types of social exchanges. The form, frequency and temporal occurrences of smiling and laughter were observed and systematically recorded, using ethological methodology, between adult dyads in four social situations: chance encounters, greeting exchanges, serious social gatherings, and relaxed social gatherings. The data support the research hypothesis but require cross-cultural confirmation.

22) D. G. Freedman & Richard Parker, Committee on Human Development, Univ. of Chicago, Behavioral Studies of Human Sexual Dimorphism

a) A film illustrating sex differences in 4-year-olds on the playground will be shown. Differences in group formation, style of play, proximity to adults, and behavior with the other sex will be included.

b) A series of studies has been performed by graduate students of the Committee on Human Development over the past 4 years. For the most part, they have had to do with various aspects of sexual dimorphism and these studies are presented under the following headings: 1) signal-significance of secondary sex characteristics; 2) sex differences in appeasement gesturing and aggression; and 3) sex differences in hierarchical organization of groups. These studies will serve as an introduction to a general discussion on sex differences.

TWo other workshop sessions will be held:

1) Observational Methods and Techniques, P. R. Harrison and D. R. Omark, and

2) Relationship between Cognition and Behavior, R. S. Marvin and D. R. Omark